

US005367664A

United States Patent [19]

Magill et al.

[11] Patent Number:

5,367,664

[45] Date of Patent:

Nov. 22, 1994

[54] ELECTRONIC DOCUMENT INTERCHANGE TEST FACILITY

	_	
[76]	Inventors:	James W. Magill, 104 Lily Ct., Allen,
		Tex. 75002; Kathleen M. Adams, 6823
		Winding Rose Trail, Dallas, Tex.
		75252; Fred A. Sammet, 2801 Rigsbee
		Dr. Dlano Tex 75074-4707

		Di., Limo, Lon Foot
[21]	Appl. No.:	753,265
[22]	Filed:	Aug. 30, 1991
[51]	Int. Cl.5	G06F 1/00
[52]	U.S. Cl	395/575; 364/226.4
[58]	Field of Sea	ırch 395/575; 364/408, 250,
		364/225.8, 226.4

[56] References Cited

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

2278368	of 1990	Japan	 G06F 15/38
3218540	9/1991	Japan	 G06F 11/28

OTHER PUBLICATIONS

David Spooner 'A data Translation Tool for Engineering Systems' 1989 pp. 96-104.

Meera M. Blattner et al. 'A User Interface for com-

puter-Based Message Translation' 1989 pp. 43-51 Ref. (AB).

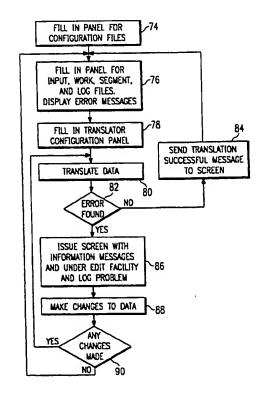
Meera M. Blattner et al. 'A Visual Interface for Generic Message Translation' 1988 pp. 121-126 Ref. (AA). Hwa-Yea Chang et al. 'Circuit simulation and Modeling' 1990 pp. 8-13.

Primary Examiner—Robert W. Beausoliel
Assistant Examiner—Albert Decady
Attorney, Agent, or Firm—Tammy L. Williams; Richard
L. Donaldson

7] ABSTRACT

A method and system for electronic data interchange (EDI) translation testing displays a plurality of operator-interactive panels for controlling pre-production translation of EDI document files. The EDI Test Facility integrates numerous translator programs to detect translation errors. Once an error is detected, the EDI test facility displays the translation error and permits an operator to interactively correct the segment of the EDI document file containing the error. Once the error is corrected, the EDI Test Facility permits retranslation of the segment. When correctly translated, the segment is added to all previously corrected segments of the EDI document file in a working file. The method and system continue until stopped by the operator or EDI document file translation is complete.

7 Claims, 4 Drawing Sheets



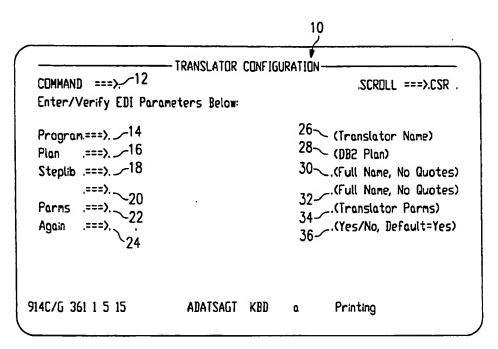


FIG. 1

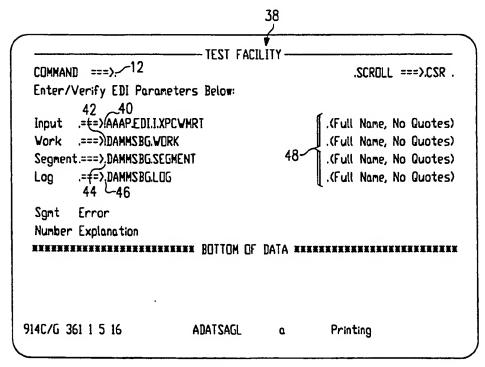


FIG. 2

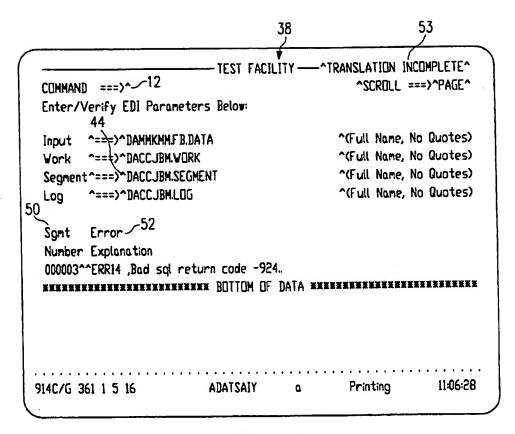
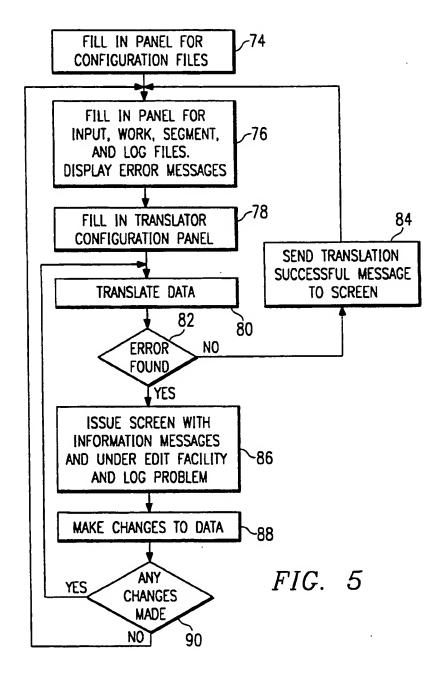


FIG. 3

56	5,4			
COMMAND ===>^ RESULTS OF TRANS Standard:^ANSI 6 TO Last Segment Pro Reason:^ERR14 ,Ba	60 ^Release:^00200^Ve ocessed Successfully; d sql return code -9	^000002^ 24 68	^SCRULL = 1	001 072^ ===>^CSR^
Correct Identifie	d Errors And Hit PF3	l To Retran	slate~72	^
********	******** TOP OF	DATA MEME	****	IXXXXXXXX
000003^ST#850#811 000004^BEG#00#SA1 000005^TAX#03-041 000006^N1#BY#CCILI 000007^PER#BD#GA 000008^N1#AK#CCILI 000009^N1#ST#CCILI 000010^N1#BT#CCILI 000011^N1#SE#TEXA 000012^PCI#1#900#E	647706±007321904±9108 64065^ ±38114065±±±910806±±9 737-006±±±±±±±±±3 DRADD TELECOMMUNICAT RY THOMSEN±TE±719-5 DRADD TELECOMMUNICAT DRADD TELECOMMUNICAT BRADD TELECOMMUNICAT SINSTRUMENTS INC^ EA=0.29±±BP±1826-143	01-29A^ FION DIV=92 31-42487 FION DIV=92 FION DIV=92 FION DIV=92	2=38010000^ 2=38010101^ 2=38010201^ =38010001^	4 ±9 1
914C/G 361 1 5 15	ADATSAIY	 a	Printing	 11:05:56
714070 301 1 3 13	ווחכיחעה	u.	r r ar cang	11.00.00

FIG. 4



ELECTRONIC DOCUMENT INTERCHANGE TEST FACILITY

A portion of the disclosure of this patent document 5 contains material which is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure, as it appears in the Patent and Trademark Office patent file or records, but otherwise 10 reserves all copyright rights whatsoever.

TECHNICAL FIELD OF THE INVENTION

The present invention relates to the methods and systems for testing the transmission of data and more 15 particularly, to a method for testing the transmission of electronic data interchange (EDI) documents files.

BACKGROUND OF THE INVENTION

In recent years many companies, in trading with 20 other companies, for the transmission and receipt or interchange of business information have come to use computerized systems known as electronic data interchange or EDI systems. EDI systems enjoy the particular advantage of having an established set of standards 25 applicable to various types of business documents. For example, in an EDI system, an invoice has a defined format and, as a result, may be rapidly transmitted between trading partners as a compact data file from the sending trading partner's computer to the receiving 30 trading partner's computer. To create the compact data files, an EDI operator must first translate the EDI documents. The EDI document files are compact data files that the receiving trading partner receives. These compact data files are translated back into documents by the 35 receiving trading partner.

Applications for EDI methods and systems include business activities such as purchasing, accounts payable and accounts receivable functions, banking transactions, electronic funds transfer and other document 40 transfers. Other EDI system applications include order filling and processing between trading partners. Not only is this helpful in buying and selling goods, but also trading partners that are transportation companies may use this information to maximize the efficiency of the 45 transportation services they provide. By using EDI systems, a trucking company, for example, may easily keep track of the origin and destination of all of its shipments throughout its service region.

The format standards for EDI documents are gener- 50 ally loosely written so that they can satisfy a wide variety of user needs. Thus, for example, while an EDI invoice format may have well-defined data fields, several aspects of the EDI invoice are variable. As a result, trading partners who agree to use an EDI system may 55 agree to the format of communication between them prior to conducting a business transaction, and thereafter communication between the trading partners has the potential to occur on an almost immediate basis.

Although EDI systems represent a significant im- 60 tinues until the EDI file is fully translated. provement in business communications between trading partners, known EDI systems stand in need of improvement in document translation efficiency. A particular problem in the translation of EDI documents is the need to assure that the documents, as they are generated from 65 various points within a trading partner, satisfy the EDI document format EDI requirements. This is particularly important in cases where failure to satisfy applica-

ble EDI document format requirements causes the translation to be either significantly incorrect or fully prohibited. It is, therefore, important that the sending trading partner ascertain that all documents satisfy the information and format requirements of the receiving trading partner before the trading partner sends them.

Known methods of testing EDI document translations require that when a receiving trading partner encounters a transmission error, the sending partner must identify and correct the error and, then, resend a corrected test EDI document file. This process often requires numerous iterations and creates time lapses which strain productivity. Correcting translation errors using a conventional EDI editing system has not proven practical, because any adjustment in the data link of EDI transmission requires that every character following the modification be adjusted. This results in a significant amount of tedious effort between both trading partners. This type of batch processing by the recipient is further limited, because only upon the detection of an error by the recipient can action be taken to correct the problem. Once this problem is corrected, it is necessary to completely rerun the file which may be halted again as a result of yet another error later in the EDI document file translation.

As a result, in order for EDI document transmissions to reach their full potential efficiency and speed there is a need for as a method and system for rapidly increasing the data translation rate between trading partners, it is necessary to have a rapid EDI translation test facility that does not strain the productivity of the receiving trading partner.

There is a need for a method and system that eliminates the batch processing necessary to identify errors in EDI translations.

There is yet the need for a method and system that permits EDI system operators to identify and correct EDI transmission errors without the need to begin again the EDI document file translation process.

SUMMARY OF THE INVENTION

The present invention, accordingly, provides an electronic data interchange testing method and system that overcomes the problems and satisfies the needs previously considered.

According to one aspect of the invention, there is provided a method for pre-production translation testing of EDI document files that comprises the steps of generating a plurality of control displays for controlling the pre-production translation of the EDI document file. Next, translation of the file takes place until a translation error arises. The method of the present invention is to display the translation error on one of the control displays so that the error may be corrected using an input to the control display. The next step is to correct the displayed translation error as indicated by the control display. This process of translating the file until a translation error arises, displaying the translation error for correction, and correcting the translation error con-

According to another aspect of the invention, there is provided within one of the control displays a plurality of initial queries for inputting initialization data pertaining to the EDI document file. The queries relate to the particular translation configuration for translating the data into a particular application program that has the ability to use the EDI document file. Moreover, a particularly attractive aspect of the invention is its ability

to produce textual segment files for containing in textual form predetermined segments of the EDI file and permitting an operator to edit the textual segment file in response to the indicated translation error. Once all errors have been noted and a translation of the relevant 5 section is complete, the segment is stored in a working file. The working file contains all of the previously corrected segments. Through this segmented approach, the working file becomes a corrected copy of the original EDI document file. Hence, upon the complete trans- 10 lation of the original EDI document file, the operator has the original EDI document file and a working EDI document file that was created by the segmentation

A technical advantage of the present invention is that 15 it permits EDI systems to realize their intended benefits by eliminating redundant data flows that occur in known systems when EDI document files have translation errors. The EDI test facility of the present invention provides the receiving trading partner the ability to 20 perform pre-production translation testing of EDI document files just prior to their translation. As a result, the EDI document file is fully translated and any errors incurred during this process are logged and can be made available to the sending trading partner as advised cor- 25 rections; thus minimizing unproductive time lapses and iterative communication cycles between trading partners.

Another advantage of the present invention is that it fully avoids the batch processing that was heretofore 30 necessary in the detecting EDI transmission file errors. Using the method and system of the present invention, a trading partner may employ the EDI test facility to correct interactively EDI document file transmission single EDI document file translation and therefrom produce an error-free translated EDI document file. Because only one translation operation is necessary to produce the error-free EDI document file, the present invention eliminates much of the tedious work and pro- 40 etary translators. ductivity strain presently existing in EDI document file

Yet another advantage of the present invention is that it permits the integration of numerous EDI application programs for error correction and translation. The inte- 45 gration that the present invention provides is functionally transparent to the operator and permits EDI document file translation with any type of translator. The solution that the preferred embodiment provides permits changing the test process from one in which a 50 number of inadequate or unrelated tools are used for EDI translation to a process where an integrated and easy to use tool kit exists to aid the EDI translation operator. As a result, the interactive testing that the preferred embodiment provides significantly reduces 55 transmission testing cycle time. This reduces software development costs and improves overall productivity in EDI document file applications among trading partners.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention and its modes of use and advantages are best understood by reference to the following description of illustrative embodiments when read in conjunction with the accompanying drawings, wherein:

FIG. 1 through 4 are various translation screens us- 65 able in a association with the preferred embodiment;

FIG. 5 is a flow chart illustrating the operation of the EDI test facility of the preferred embodiment; and

APPENDIX A provides a listing of the software code that the preferred embodiment of the present invention implements for EDI document file translation testing.

DETAILED DESCRIPTION OF THE INVENTION

The preferred embodiment of the present invention is best understood by referring to the FIGUREs wherein like numerals are used for like and corresponding parts of the various drawings.

The EDI test facility of the preferred embodiment integrates within the EDI system environment an operator interactive translation test facility that is accessible through a computer time share option link. In this environment, the EDI test facility of the preferred embodiment has numerous test configuration options. The EDI test facility of the preferred embodiment integrates its operation with the principal communication path among EDI partners for EDI transmissions known as the EDI system gateway. This permits an EDI system operator to locate and select an EDI transmission file for immediate translation testing. Once translation testing has commenced, error situations are brought to the operator's attention along with recommendations for correcting the error. The operator has the option to fix the error and continue testing until the translator detects another translation error. As translation testing continues, the test results are saved into a working file. The working file may be tested to verify a successful translation. Additionally, the preferred embodiment generates a log file to provide the operator with a listing of errors encountered during translation testing.

The EDI test facility may be used on any computer errors. This allows the trading partner to perform a 35 equipped to perform EDI translations and may operate in conjunction with any commercially available EDI translator software package. Examples of translator packages usable with the preferred embodiment include the following: transettlements, interbridge and propri-

> To use the EDI test facility of the preferred embodiment, the operator may enter a time sharing option and receive an EDI document file on which to perform testing. To perform the operation, the EDI test facility of the preferred embodiment presents the operator with a set of operator friendly panels. FIGS. 1-4 illustrate the panels or screens that the operator sees in testing EDI document file for translation errors. In particular, FIG. 1 illustrates the "Translator Configuration Screen" that the preferred embodiment provides to the EDI translation test operator. The Translator Configuration Screen of FIG. 1, as indicated by Translator Configuration label 10, permits the operator to input a Command for EDI translation at point 12 of the screen, the EDI translator program that the operator will use at point 14, the EDI translation plan at point 16, the EDI Steplib, at points 18 and 20, EDI parms at point 22, and at point 24 the ability to respond to a query of whether a translation identified at points 14-22 as being trans-60 lated again.

The EDI Steplib input defines a library associated with the test facility wherein the translator program resides, and the EDI parms input receives the parameters that the operator desires to pass to the translator program. The operator may provide these Translator Configuration Screen inputs to the EDI test facility of the preferred embodiment using a key board or other computer input device.

Associated with each of the inputs of points 14-24 are respective parameter descriptors. In particular, for the Program input point 14, the preferred embodiment indicates at point 26 that the proper response to the program input 14 is the "Translator Name." For the EDI 5 plan input 16, the "DB2 Plan" parameter descriptor 28 means that for this particular translator, the DB2 plan is used. For Steplib inputs 28 and 20, descriptors 30 and 32 specify that the "Full Name" of the Steplib is necessary and that no quotes may be used. Parms input 22 must be 10 Translated Parms, as descriptor 34 indicates. The appropriate response for the "Again" input 24 is "yes" or "no" with a default to "yes" as indicated by descriptor

ration by appropriately responding to the Translator Configuration Screen of FIG. 1, the operator indicates the completion of this step by hitting the enter key. Test Facility Screen of FIG. 2 appears. Immediately thereafter, identifies Test Facility label 38 the Test Facility 20 Screen. With this screen, the operator may input a command at point 12 and set up particular files necessary to perform the EDI document file transmission testing. For example, in the preferred embodiment, the operator provides to the EDI Test Facility the input file at point 25 40. In this example, the input file has the name, ".AAA.EDI.I.EXPCWMRT." The operator defines a work file at point 42 (e.g., ".DAMMSBG.WORK"), a segment file at point 44 (e.g., ".DAMMSBG.SEG-MENT"), and a log file (e.g., "DAMMSBG.LOG") at 30 point 46. The Test Facility Screen also assists the operator by describing the types of fields necessary at points 40-46 by the input descriptors 48 which appear as ".(Full Name, No Quotes)."

mand to conduct testing that the operator inputs at point 12, the Test Facility Screen can display the existence of a translation error. FIG. 3 shows the Test Facility screen that appears during translation testing. FIG. 3 shows outputs at Segment Number designator 40 50 and Error Explanation output 52 to provide indication of errors. In the example, the segment number where an error exists is segment number "000003" having an associated error code of "EER14" and an explanation of "Bad Sql Return Code - 924." This means that 45 at segment number 000003 there was a DB2 problem in the EDI document file translation. With this error identifying information, the operator may insert an "Edit" command into the Command input point 12 of the Test FIG. 4.

The preferred embodiment of the present invention, upon identifying the translation error, places a segment of the original input file that contains the translation error into a segment file. The segment file, in the exam- 55 ple of the preferred embodiment, is identified at point 44 of the Test Facility Screens of FIGS. 2 and 3 and the Edit Screen designator 54. The Edit Screen designator 54 shows that the segment file name is "DACCJBMator that the operator is viewing the Edit Screen.

In the Edit Screen, as in the Translator Configuration Screen of FIG. 1 and the Test Facility Screen of FIGS. 2 and 3, command input 12 permits the operator to provide a command input. Other outputs of the Edit 65 Screen include descriptive output of the results of the translation at output point 58, the Standard for translation at point 60 (e.g., "ANSI") the Release descriptor at

output point 62, (e.g., "00200"),-the applicable Version at output point 64 (e.g., "002001"), and the particular Agency for output at point 66 (e.g., "X"). Because of the "Last Segment Process Successfully" output point 68, the operator at all times knows the last segment that was successfully processed. At the "Reason" output point 70, the operator receives the same information that previously appeared at Error Explanation output 52 of the Test Facility Screen shown in FIG. 3. This provides as the reason why the translation error occurred. Finally, the operator is prompted to "Correct Identified Errors And Hit PF3 to retranslate the corrected segment (e.g., segment 3 in this example).

The bottom part of the operator screen appearing at Once the operator establishes the translator configu- 15 FIG. 4 shows the portion of the original EDI document file that the segment file contains. With this small segment, the operator may identify the error that the Test Facility Search lists and correct it. After which, the operator may depress the PF3 key of his keyboard to retranslate the segment and thereby verify that the error has been corrected.

In using the EDI Test Facility of the preferred embodiment, at each segment that the test facility identifies, the Test Facility output of FIG. 3 and the Edit Screen output of FIG. 4 communicate to the operator the existence of an error and the error location, as well as provide to the operator the ability to correct the error interactively. Once the error is corrected, the operator retranslates the corrected segment and the EDI Test Facility of the preferred embodiment continues to translate the EDI document file (e.g., DAMMKMM.FB.DATA of FIG. 3) until the translation is complete.

The Translation Incomplete signal 53 of FIG. 3 indi-In response to this information and a subsequent com- 35 cates that the translation of input file DAMMKMM.F-BDATA is not completed because of the error identified by segment number output 50 and error explanation output 52 (i.e., "ERR14, Badsql Return Code - 924 at segment 000003).

FIG. 5 shows a flow chart of the preferred EDI Test Facility embodiment to provide to the operator the screens appearing in FIG. 1-4. First the operator fills in the Transfer Configuration Screen to establish the configuration files of step 74. Next, the operator fills in the test facility panel for input, work, segment, and log files at step 76. Also at step 76, using the Test Facility screens of FIGS. 2 and 3 the EDI Test Facility of the preferred embodiment displays any error messages arising from the EDI translation. Next, the EDI Test Facil-Facility Screen to see the Edit Screen that appears at 50 ity of the preferred embodiment at step 78 permits the operator to fill in the translator configuration of FIG. 1. The preferred embodiment then translates the data at step 80 and queries whether an error has been found in the EDI file translation at step 82.

If no error occurs, the preferred embodiment sends a translation successful message to the Test Facility screen at step 84 and then permits the operator to change the input work segment and log files and continue at steps 76 and the Translator Configuration of SEGMENT." The Edit Label 56 indicates to the oper- 60 step 78. On the other hand, if an error is found at step 82, EDI test facility of the preferred embodiment at step 86, issues the information to the Test Facility Screen (see FIG. 3) and provides the operator with the ability to use the Edit Facility of the preferred embodiment. At step 86, the preferred embodiment also logs the problem in the previously designated log file (see FIG. 3).

Under the edit facility, the EDI Test Facility permits the operator to make changes to the data at step 88 and

query whether any changes were made at step 90. If no changes were made, control returns to step 76 where the operator is to fill in the input, work, segment, and log file as well as to display the error message arising from the failed translation. On the other hand, if 5 have been described in detail, it should be understood changes are made then the program control returns to step 80 to translate data and determine whether any further error exists.

Appendix A provides a complete listing of the source code for the EDI Test Facility of the preferred embodi-

Although the present invention and its advantages that various changes, substitutions and alterations can be made herein without departing from the spirit and scope the invention as defined in the appended claims.

. . APPENDIX A

TETLE 'EDITSBED - EDI	TEST FACILITY'	00010000
SPACE Z	. ************************************	00020000 00030000
X	X	00040000
	I C E *	00050000
* THIS EDI TEST FACILITY * IS TI CL		00060000 00070000
*TEXAS INSTRUMEN	TS INTERNAL DATAX	00008000
	AS INSTRUMENTS X	00090000
X GN I		00100000
* 13500 N. CENTRAL EXPRESSMA	r, Dallas, Texas 75265 *	00120000
**************************************	**************************************	00130000
SPACE 2		00150000
REGS		00160000
SPACE_Z		00170000
SPACE Z		00190000
EDIDEQU	•	00200000
SPACE Z CVT DSECT=YES		00210000
TICVT		00230000
SPACE 2		00240000 00250000
IFGACE 2		00260000
IFGRPL		00270000
SPACE 2		00280000 00290000
TEFZB4D0 SPACE 2		90300000
IEFZB4D2		00310000
SPACE 2 DCBD DSORG=BS,DEVD=D	A	00320000 00330000
SPACE 2		00340000
DCBPARMS DSECT	•	00350000
DCBXDDNM DS CL8 DCBXRFMT DS X	•	00360000 00370000
DCBXLREC DS XL2		00380000
DCBXBLKS DS XLZ DCBXPRIM DS XL3		00390000
DCBXPRIM DS XL3 DCBXNEW EQU DCBPARMS, X-DCBP	ARMS,C'X'	00410000
TRANKEC DSECT		00420000
TRANSTND DS CL8 TRANRLSE DS CL5		00430000 '00440000
TRANVERS DS . CL12		00450000
TRANAGCY DS CL2		00460000
TRANSDLM DS CL1 TRANREAS DS CL71	•	00460000
TRANBIF DS CL10	<u>.</u>	00490000
TRANGELM DS CL8 TRANLAST DS CL6		0050000
TRANTAG DS CL20		00520000
TRANVAL DS CL40		00530000
TRANSTOR EQU TRANTAG, X-TRANT EDITSBED CSECT	AG, C·C·	00540000 00550000
USING EDITSBED.RIO	NOTE BASE ADDRESSIBILITY	00560000
: STM R14.R12.12(R13)	SAVE ENTRY REGS COPY ENTRY ADDRESS	00570000
IR RIO,RIS	INITIALIZE 2ND BASE REG	00590000
(A R11,2048(,R11)		0060000
UIING EDITSBED+4096,R	11	00610000
LA RI.SAVEAREA	POINT TO SAVE AREA	00620000
ST R13,4(,R1) ST R1,8(,R13)	LINK TO CALLERS SAVE AREA LINK TO OUR SAVE AREA	
LR R13,R1	ESTABLISH SAVE AREA	00650000
SPACE 1		00660000
X SET UP AN ESTAE EXIT		× 00670000 × 00680000
X	***************************************	× 00690000
SPACE 1	ESTABLISM AN SETAE	00700000
ESTAE TBABEND, PARAM=(R10),	ESTABLISH AN ESTAE	+00710000 +00720000
XCTL=YES		007,30000
SPACE 1		00740000
* INITIALIZE		× 00750000 × 00760000

y	¥ 00770080
SPACE 1 OI FLAGI, INIT SET INITIALIZING USING IHADCB, R12	00780000 00790000 00800000 00810000
ST RO, ISPLADDR SAVE ADDRESS	00820000 00830000 00840000
X DELINE LUCCOSSION OF LIAMO LAW SENCEMBER DELINES	* 00860000 * 00870000 * 00880000
SPACE 1 L RIS, ISPLADOR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15), (CONTROL, ERRORS, RETURN), VL SPACE 1	00920000
DEETNE MISC. VARIABLE NAMES TO ISPE	- <u>× 00930000</u> × 00940000 -× 00950000
SPACE 1 L R15, ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15), (VDEFINE, ZUSERLIT, ZUSER, CHAR, LENGTHS), VL	00960000 00970000 00980000 00990000
SPACE 1 L · R15,ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15),(VDEFINE, DSNLIT, DSN, CHAR, LENGTH44),VL SPACE 1	01000000 01010000 01020000
RIS, ISPLADOR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15), (VDEFINE, DSNHLIT, DSNH, CHAR, LENGTH44), VL SPACE 1	01030000 01040000 01050000 01060000
CALL (15), (VDEFINE, DSNALITT, DSNAT, CHAR, LENGTH94), VL SPACE 1 SPACE 1 SPACE 1 SPACE 1	01070000 ' 01080000 01090000
CALL (15); (VDEFINE, DSNALTYP, DSNAP, CHAR, LENGTH44), VL SPACE 1 L R15.ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15), (VDEFINE, DSNCLITT, DSNCT, CHAR, LENGTH44), VL	01100000 01110000 01120000 01130000
SPACE 1 L R15, ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15), (VDEFINE, DSNCLITP, DSNCP, CHAR, LENGTH44), VL	01140000 01150000 01160000 01170000
SPACE 1 RIS.ISPLADOR CALL (15), (VOEFINE, DSNILITT, DSNIT, CHAR, LENGTH44), VL SPACE 1	01130000 01190000 01200000
L RIS.ISTLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15),(VDEFINE,DSNILITP,DSNIP,CHAR,LENGTH44),VL SPACE 1 L RIS.ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE	01210000 01220000 01230000 01240000
CALL (15).(VDEFINE.DSNXLITT.DSNXT.CHAR.LENGTH64).VL SPACE 1 1 R15.ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE	01250000 01260000 01270000
CALL (15), (VDEFINE, DSNXLITP, DSNXP, CHAR, LENGTH44), VL SPACE 1 L L R15, ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15), (VDEFINE, DSNOLITT, DSNOT, CHAR, LENGTH44), VL	01280000 01290000 01300000 01310000
SPACE 1 L R15_ISPLADDR LOAD ADDRESS_OF_ISPLINK_ROUTINE CALL (15),(VDEFINE,DSNGLITP,DSNGP,CHAR,LENGTH44),VL	01320000 01330000 01340000 01350000
SPACE 1 L R15, ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15). (VDEFINE. DSNSLIT, DSNS. CHAR. LENGTH94). VL SPACE 1	01360000 01370000 01380000
R15,ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15),(VDEFINE,DSNLLIT,DSNL,CHAR,LENGTH44),VL SPACE 1 R15,ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE	01390000 01400000 01410000 01420000
CALL (15),(VDEFINE,STDLIT,STD,CHAR,LENGTH8),VL SPACE 1 PISTSPLANDR LOAD ADDRESS OF ISPLINK ROUTINE	01430000 01440000 01450000 01460000
CALL (15), (VDEFINE, RESLIT, RES, CHAR, LENGTHS), VL SPACE 1 L R15, ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15), (VDEFINE, VERSLIT, VERS, CHAR, LENGTH12), VL	01470000 / 01480000 01490000
SPACE 1 L R15,ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15),(VDEFINE,AGCYLIT,AGCY,CHAR,LENGTH2),VL SPACE 1	01500000 01510000 01520000 01530000
CALL (15), (VDEFINE, REASLIT, REAS, CHAR, LENGTH71), VL	01540000 01550000 01560000
CALL (15), (VDEFINE, NUMBLIT, NUMB, CHAR, LENGTH6), VL SPACE 1 L R15, ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE	01570000 01580000 01590000 01600000
CALL (15), (VDEFINE, LASTLIT, LASTSEG, CHAR, LENGTH6), VL SPACE 1 R15, ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15), (VDEFINE, RTC, RTNCODE, HEX, LENGTH4), VL	01610000 01620000 01630000 01640000
SPACE I R15, ISPLANDR LOAD ADDRESS OF ISPLINK ROUTINE CALL (15), (VDEFINE, REEZ, REEZCODE, HEX, LENGTH2), VL	01650000 01660000 01670000

_	SPACE	1	01480000
	<u>L</u>	R15, ISPLADDR LOAD ADDRESS OF ISPLINK ROUTINE	01690000
	SPACE	(15),(VDEFINE, DD, DDEKK,CHAK,(ENGIR8),VL	01700000 01710000
X			01720000
×	CREATE	TABLE NEEDED FOR FIRST PANEL X	01730000
*	SPACE		01750000
•	L	R15, ISPLADOR LOAD ADDRESS OF ISPLINK ROUTINE	01760000
·	SPACE	(15), (TBCREATE, VARTABLE, , VARLIST, NOWRITE), VL	01770000 01780000
			01790000
	BNZ	ERRORO1 YES-	01800000
٠	SFACE	1	01810000
. Xarreries	RETRIE		01820000 01830000
X			01840000
		<u> </u>	01850000
	L CALL		01860000 01870000
	CDACE	1	01000000
¥	ALLOCA	TE DISPESHR DATASETS NEEDED BY TRANSLATOR X	01890000
<u> </u>		to any authoria necessariantes y	01910000
	SPACE	1	01970000
	MVI	DYNRB+S99VERB-S99RB, S99VRBAL_SET_TO_ALLOCATE	01940000
	USING	DCBPARMS, RZ GET ADDRESSABILITY	01950000
DSLISTSX		OH DIALLOCS DOINT TO TEXT INST LIFE	01960000
	-LA ST	DI NAMBRACOGLATADA-COODE CLUDE VUUDECE IN DEVINEEL BIR	01970000
	CLI	G(KS)'C EUD OF F121!	01990000
	BE	ALLOCOLD YES-	02000000
	WAC WAC	TXTDD+S99TUPAR-S99TUNIT(3).DCBXDDNM_SET_DDNAME_ TXTDSN+S99TUPAR-S99TUNIT(44),=CL44' BLANK OUT DSN	02020000
	MVC		02030000
	LA	TXTDSN+S99TUPAR-S99TUNIT(L'ZUSER), ZUSER COPY TSO USERID R15,TXTDSN+S99TUPAR-S99TUNIT POINT TO WORK AREA R14.44 SET COUNT	02040000
FINDBLNX	LA	OM .	02050000
1 111000111	CLI	ACOTEL CE ETAIN ETRET BLANK	02070000
	ΒE	FOUNDELX FOUND IT- B15.1(R15) POINT TO NEXT BYTE	02080000
	-LA	R15,1(R15) POINT TO NEXT BYTE R14,FINDBLNX	02090000
FOUNDBLX		OH	02110000
	MVC	O(4,R15),=CL4'.TF.' SET MIDDLE NODE	02120000
	HVC -	R14,FINDBLNX OH O(4,R15),=CL4'.TF.' SET MIDDLE NODE B15,4(R15) INCREMENT POINTER O(8,R15),DCBXDDNM SET REST OF DSN O(8,R15),DCBXDDNM SET REST OF DSN	02130000
	BAL	R9, DYNA GO ALLOC FILE CKERRORX ERROR ON ALLOCATION	02150000
	В	CKERRORX ERROR ON ALLOCATION	02160000
MEXTLISS	DS LA	R2,L'DCBXNEH(R2) POINT TO NEXT ENTRY	02170000 02180000
7	В	DSLISTSX CONTINUE	02190000 -
CKERRORX		OH	02200000 02210000
	CLC BNE	=XL2'1708',DYNRB+S99ERROR-S99RB LOCATE ERROR? ERRORUZ NO- RI,DSALLOCN POINT TO TEXT UNIT LIST	02220000
	LA	RI, DSALLOCH POINT TO TEXT UNIT LIST	02230000
	ST	R1,DYNRB+S99TXTPP-S99RB STORE ADDRESS IN REQUEST BLK TXTRECEM+S99TUPAR-S99TUNIT(L'DCBXREMT),DCBXREMT	02240000 02250000
	MVC MVC	TXTLRECL+S99TUPAR-S99TUNIT(LTDC8XLREC).DC8XLREC	02260000
	MVC	TXTBLKSZ+S99TUPAR-S99TUNIT(L DCBXBLKS), DCBXBLKS	02270000
•	MVC BAL	TXTBLKSZ+S99TUPAR-S99TUNIT(L'DCBXBLKS), DCBXBLKS TXTPRIME+S99TUPAR-S99TUNIT(L'DCBXPRIM), DCBXPRIM R9, DYNA GO ALLOC FILE	02280000 02290000
	BAL	ERROROZ ERROR ON ALLOCATION	02300000
	В	NEXTLISS . CONTINUE	02310000 .
	DROP SPACE	R2 1	02320000 02330000
X			
· 🖁	ALLOC		02350000
,x	SPACE		02360000 02370000
אננסכסנם		он	-02380000
	MVI	DYNRB+S99VERB-S99RB, S99VRBAL SET TO ALLOCATE	02390000 .
	LA	RZ.DSLISTO POINT TO DATASET LIST	02400000
ner teres		DCBPARMS,RZ GET ADDRESSABILITY OH	02410000 . 02420000
DSLISTOX	LA LA	R1.DSALLOCO POINT TO TEXT UNIT LIST .	02430000
	ST	RI.DYNRB+S99TXTPP-S99RB STORE ADDRESS IN REQUEST BLK	02440000
	_CLI	O(R2),C' END OF LIST? ALLOCSO YES-	_02450000 _02460000
	MVC	TXTDD+S99TUPAR-S99TUNIT(&).DCBXDDNM SET DDNAME	02470000
	MVC	TXTDSN+S99TUPAR-S99TUNIT(44),=CL44' ' BLANK QUT DSN	02480000
	−₩ĂC	_TXTDSN+S99TUPAR-S99TUNIT(L'ZUSER),ZUSER_COPY_TSO_USERID_ R15.TXTDSN+S99TUPAR-S99TUNIT_POINT_TO_WORK_AREA	_02490000
	LA LA	R15,121D3NT37710PAR-5791UN11 PUIN1 10 WURK AREA R14,44 SET COUNT	02518000
FINDBLNK	. DS	OH	02520000
		_O(R15).C' FIND_FIRST_BLANK FOUNDBLK FOUND IT-	_02530000
	BE La	FOUNDBLK FOUND IT- R15.1(R15) POINT TO NEXT BYTE	02540000 02550000
	BCT	R14, FINDBLNK	02560000
FOUNDBLE		0H 0/6 9/5) =C16! TE 1 SET MYDDLE NODE	_02570000
	MVC	0(4,R15),=CL4'.TF.' SET MIDDLE NODE	02580000

		15	U
•	SPACE	DI DEALLOCE DOTHE TO TEXT UNIT LICE	03480000
	ST	RI, DSALLOCS RI, DYNRB-599TXTPP-599RB STORE ADDRESS IN REQUEST BLK	03490000 03500000
	MVI	DINKSTOTYVERD-OTYKD, OTYVKDAL SEL IU ALLUCALE	03510000
		waynesser result to purvest \$231	03520000
DSLISTX	DS CLI	OH O(RZ),C' END OF LIST?	03530000
	BE		03540000
	MVC	TXTDD+399TUPAR-599TUNIT(8),0(R2) COPY DDNAME	03560000
•	HVC	TXTDSH+S99TUPAR-S99TUNIT(44).8(R2) COPY DS NAME	03570000
	971	R9. DYNA GO ALLOC FILE	03580000
	B LA	R2.52(R2) POINT TO NEXT DATASET NAME	03590000
	В	CONCLIST YES- TXTDD+599TUPAR-599TUNIT(3),0(R2) COPY DDNAME TXTD5in:599TUPAR-599TUNIT(44).8(R2) COPY DS NAME R9.DYN2 GO ALLOC FILE (**RORO2 ERROR ON ALLOCATION R2.52(R2) POINT TO NEXT DATASET NAME DSLISTX CONTINUE	03600000
CONCLIST	DS	DSLISTX CONTINUE OH RI, DSCONCLS POINT TO TEXT UNIT LIST RI, DYNRB+S99TXTPP-S99RB STORE ADDRESS IN REQUEST BLK DYNRB+S99VERB-S99RB, S99VRBCC_SET_TO ALLOCATE R2, DSLIST POINT TO DATASET LIST OH =C'VSAM', O(R2) END OF LIST?	03610000
	LA	RI', DSCONCLS POINT TO TEXT UNIT LIST .	03620000
	ST	R1. DYNRB+S99TXTPP-S99RB STORE ADDRESS IN REQUEST BLK	03640000
	MYI -	DYNRB+S99VERB-S99RB, S99VRBCC SET TO ALLOCATE	03650000
CONCNEXT	DS	OH LOTHI IN DAINZEL (12)	03660000
0011011211	CLC	=C'VSAM', O(R2) END OF LIST?	03680000
	JE	DISPPRIMYES	03690000
•	MVC	TXTCONC+S99TUPAR-S99TUNIT(8), 0(R2) COPY DDNAME	03700000
	MVC	TYTCONCY.O(R2) COPY SECOND RONAME	03/10000
	BAL	R9, DYNA GO ALLOC FILE	03730000
	В	ERROROZ ERROR ON ALLOCATION	03740000
	LA R	CONCUEST CONTINUE	03750000
	SPACE	1	0370000
X			× 03780000
X	DISPLA	C'VSAM', O(R2) END OF LIST? DISPPRIM TYES TXTCONC-599TUPAR-S99TUNIT(8), O(R2) COPY DDNAME R2,52(R2) POINT TO NEXT DDNAME R7,DYNA GD ALLOC FILE ERRORG2 ERROR ON ALLOCATION R2,52(R2) POINT TO NEXT DDNAME CONCNEXT CONTINUE TY PRIMARY PANEL OH R12,LOGDCB POINT TO LOG DCB DCBOFLOS, DCBOFOPN IS IT OPEN? LOGGLQSE NO- 1 (R12)) CLOSE IT	× 03790000
X	SPACE		00000820 ×
DISPPRIM	05	ÔH COMPANY OF THE PROPERTY OF	03820000
	LA	R12, LOGDCB POINT TO LOG DCB	. 03830000
	TM	DCBOFLGS, DCBOFOPN IS IT OPEN?	03840000
	SPACE	1000000	03850000
	CLOSE	C(R12)) CLOSE IT COPY DCA ADDRESS	03870000
		1	03880000
	ᆤᄝᅲᇫᇎᆖ	RI.RIZ COPY DCB ADDRESS	03890000
	SPACE	DOL (1) FREE QSAM BUFFERS	03900000 03910000
LOGCLOSE			03920000
	LA	RI, DSUNALOC POINT TO TEXT UNIT LIST	
	ST	RI, DSUNALOC POINT TO TEXT UNIT LIST RI, DYNRBH-S99TXTPP-S99RB STORE ADDRESS IN REQUEST BLK DYNRBH-S99TVARB-S99RB, S99VRBUN SET TO UNALLOCATE TXTDD+S99TUPAR-S99TUNIT(8),=CLB'USERFILE' R9, DYNA GO UNALLOC X+4 ERROR ON UNALLOCATION TXTDD+S99TUPAR-S99TUNIT(8),=CLB'INPUT' R9, DYNA GO UNALLOC X+4 ERROR ON UNALLOCATION TXTDD+S99TUPAR-S99TUNIT(8),=CLB'SGMTFILE'	03940000
	MVC	TXTDD+S99TUPAR-S99TUNIT(8).=CLB'USERFILE'	03960000
	BAL	R9. DYNA GO UNALLOC	03970000
	В	X+4 ERROR ON UNALLOCATION	03980000
	MVC BAL	IXIDD+39910PAR-39910NII(8),=CLB'INPUT'	03990000
•	В	*+4 ERROR ON UNALLOCATION	04010000
	MVC	TXTDD+S99TUPAR-S99TUNIT(8),=CL8'SGMTFILE'	04020000
	BAL	R9, DYNA GO UNALLOC	04030000
	B SPACE	X+4 ERROR ON UNALLOCATION	04040000
	MVC	TXTDD+S99TUPAR-S99TUNIT(8),=CL8'LOG'	04020000 04030000 04040000 04050000
	BAL	NATION OF STREET	0401000
•	B SPACE	X+4 ERROR ON UNALLOCATION .	04080000
	L	RIS.ISPLADOR LOAD ADDRESS OF ISPLINK ROUTINE	04090000
	CALL	(15),(TBTOP,VARTABLE),VL DISPLAY	04110000
	SPACE	1	04120000
	CALL	R15, ISPLADOR LOAD ADDRESS OF ISPLINK ROUTINE	04130000
	SPACE	1	04150000
	CH	R15, = H'8' END/RETURN ENTERED!	04160000
•	-BE -SPÆCE	CONFIG YES-	04170000
X			04180000
×	DELET	E AND RECREATE TABLE OF ERRORS *	04200000
X		* 	04210000
	SPACE	Z .	04220000
	CALL	RIS, ISPLANDR LOAD ADDRESS OF ISPLINK ROUTINE (15), (TBCLOSE, VARTABLE), VL	04230000
	SPACE	J	04240000 04250000
	L	RIS. ISPLADOR I DAD ADDRESS OF TSPLTNY OCUTTIVE	04260000
	CALL	(15),(TBCREATE,VARTABLE,,VARLIST,NOWRITE),VL	04270000
	SPACE LTR	R15,R15ERROR?	04280000
	BNZ	ERRORO1 YES-	04290000
	SPACE	2	04310000.
¥	ALLOG	ATE INPUT FILE SPECIFIED BY USER	04320000
	***		04330000
	SPACE	2	04340000 04350000
	LA	RI, DSALLOCS POINT TO TEXT UNIT LIST	04360000
	ST	RI.DYNRB+S99TXTPP-S99RB STORE ADDRESS IN REQUEST BLK	0437,0000
	114 7	DYNRB+S99VERB-S99RB, S99VRBAL SET TO ALLOCATE	04380000

		•	5,367,664	
		17	2,22.,22.	18
·M	IVC T	- -	(8),=CL8'USERFILE' SET DDNAME	04390000
ř	IVC T	XTDSN+S99TUPAR-S99TUNI	T(44), DSN COPY DS NAME	04480000
	AL	9.DYNA GO RROROZ ERR	ALLOCATION	04410000
Š	PACE 1			04420000
	A R	1, DSALLOCO POI	INT TO TEXT UNIT LIST B_STORE_ADDRESS_IN_REQUE <u>ST_BLK_</u>	04440000 04450000
	IVI	YNRB+599VERB-599RB,599	VRBAL SET TO ALLOCATE	4400000
	IVC I	XTDD+S99TUPAR-S99TUNIT	((8),=CL8'LOG' SET DDNAME (T(44),DSNL COPY DS NAME	04470000 / 04480000
	IVC T	2,DYNAG0_	ALLOC FILE	04490000
	8	RROROZ ERR	ROR ON ALLOCATION INT TO TEXT UNIT LIST	04500000 04510000
	ST F	1.DYNRB+S99TXTPP-S99RB	STORE ADDRESS IN REQUEST BLK	04520000
	1VT I	YNR8+S99VERB-S99RB.S99	PVRBAL SET TO ALLOCATE	04530000
	1VC] 1VC]	XTDD+599TUPAR-599TUNI YTN <n+599tupar-599tuni< td=""><td>((8),=CL8'INPUT' SET DUNAME IT(44).DSNW COPY DS NAME</td><td>04540000 04550000</td></n+599tupar-599tuni<>	((8),=CL8'INPUT' SET DUNAME IT(44).DSNW COPY DS NAME	04540000 04550000
	BAL F	GO GO	ALLOC FILE	04560000
	3	RROROZ ERF	ROR ON ALLOCATION	04570000
	.A 8	DERR, DCBDDNAM SET	T(8),=CL8'INPUT' SET DDNAME IT(44),DSNH COPY DS NAME ALLOC FILE ROR ON ALLOCATION INT TO DCB T DDNAME IN ERROR MSG EN FILE S OPEN SUCCESSFUL? COR FB RECORDS? ROR T LRECL ECL = 80? ERROR	04590000
	SPACE :	-	ev erie	04600000
	PACE	(R12), (INPUI)) UPI	EN PILE	04620000
•	TM I	CBOFLGS, DCBOFOPN HAS	S OPEN SUCCESSFUL?	04630000 .
	BNO I	ERRORO6 NCBRECEM.DCBRECE+DCBREC	CRR FB RECORDS?	. 04650000
	BNO	RRORIO ERI	ROR	04660000
	LH ! CH !	RO, DCBLRECL GE	T LRECL FC1 = 807	04670000
	BNE	ERRORIO NO	ERROR	04690000
	SPACE	(0)2))	OSE FILE	04700000 04710000
	SPACE		GJE FILE	04720000
	MVI .	DYNRB+S99VERB-S99RB.S9	9VRBAL SET TO ALLOCATE T(8), =CL8'SGMTFILE' SET DDNAME	04730000
	MVC	TXTDD+599TUPAR-599TUNI TYTDCN+509TUPAR-599TUNI	IT(44), DSNS COPY DS NAME	04740000 04750000
	BAL	R9,DYNA · GU		
		ERROROZ R12.OUTDCBX PO	ROR ON ALLOCATION	04770000 04780000 04790000 04800000
•	MVC	DDERR.DCBDDNAM SE	T DDHAME IN ERROR MSG	04790000
	SPACE	1		04800000
	OPEN SPACE	((R1Z),(INPUT))	'EN FILE	04810000
	TM	DCBOFLGS.DCBOFOPN WA	S OPEN SUCCESSFUL!	04830000
	ENG TM	ERROROS NO DCRUECEM DCRUECV+DCRUE	EN FILE S OPEN SUCCESSFUL?	04840000 04850000
	BNO	ERROR11 NO	- ERROR	04860000
	LH CH	KU,ULBLKELL GE	T LRECL RECL = 259?	04870000
			ERROR	04890000
	SPACE	((813))	DERROR OSF FILE	04900000
	SPACE	((R1Z)) CL	FILE STREET	04920000
	MVC	IDCB =CLB 'USERFILE' SE	T INPUT DONAME FOR REBLOCK	04930000
•	MVC LA	R12,LOGDCB P	POINT TO STORE DCB	04950000
	MVC	DDERR, DCBDDNAM S	SET DONAME IN ERROR MSG	04960000
	SPACE OPEN	((R12).(QUTPUT)) 0	PEN FILE	04980000
	SPACE	i	DERROR OSE FILE TINPUT DDNAME FOR REBLOCK OUTPUT DDNAME FOR REBLOCK OINT TO STORE DCB SET DDNAME IN ERROR MSG OPEN FILE HAS OPEN SUCCESSFUL?	04990000
	TM BNO	DCBOFLGS, DCBOFOPN F ERRORG6	40- UPEN SUCCESSFUL?	05010000
TRANLOOP	כע	VII.		0205000
	SPACE	I REBLK. (DCBNAMES). VL GC	REBLOCK FILE FOR XLATOR	05030000 05040000
	SPACE	1		05050000
	LTR BNZ		REBLOCK OK?	05060000 05070000
	SPACE	1		05080000
	SPACE	R15, ISPLADOR LO	OAD ADDRESS OF ISPLINK ROUTINE	05090000
	CALL	(15), (SELECT, LENGTH11.	,SELCMD),VL	05110000
	SPACE		VDASS CUECY	05120000 05130000
	BNZ		YPASS CHECK ES-	05140000
	SPACE			05150000 × 05160000
×	GET I	FORMATION ABOUT PROBL		* 05170000
X				* 05180000
CHECKERR	SPACE	OH .		05190000 05200000
	LA	R12, ERRDCB	POINT TO ERROR DCB	05210000
	MVC		SET DDNAME IN ERROR MSG SET EOD ADDRESS	05220000 05230000
	STCM	RO, B'O111', DCBEODA	IN DCB	. 05240000
	SPACE OPEN	((R12),(INPUT))	OPEN FILE	05250000
	SPACE	1		05270000
•	TM	DCBOFLGS, DCBOFOPN	WAS OPEN SUCCESSFUL?	05280000 0529000
	_BNO		GET BUFFER ADDRESS	05300000

5,367,664

		21		04210000
	LA R	12,0UTDC8	POINT TO OUTPUT DC3	06220000
	MVC D	DERR, DCBDDNAM .	SET DONAME IN ERROR MSG	06230000
	SPACE I	(912) (NUTPUT))	OPEN ETLE	06240800
	SPACE 1	TOTAL STATE OF THE	_B(_E(06260000
	TM D	CBOFLGS, DCBOFOPN	WAS OPEN SUCCESSFUL?	06270000
	BNO E	RRORO6	NO- OMIFOD DESET FLAGS	06280000 06290000
NEXT SONT	- N Z D	H	RINERA RESEL PLASS	06300000
1122130111	BAL R	9,FINDSGMT	YES- GO FIND SEGMENT	06310000
	B 6	RRORO8	ERROR-	06320000
	В	1 8118 E B DM	POINT TO SEGMENT	06330000
	SPACE I			06350000
	PUT C	IUTDCB	WRITE IT	06360000
	SPACE I	FXTSGMT	NORMAL	06380000
CLOSEOUT	DS 0	OH		06390000
	LA F	R12, OUT DCB	POINT TO DUTPUT DCB	06400000
	-35ACE-1	(812))	CLOSE IT	06420000
	SPACE I			06430000
	LR	R1,R12	COPY DCB ADDRESS	06440808
		1 (1)	FREE QSAM BUFFERS	06460000
	SPACE			06470000
, <u>X</u>	POTUC !	IO ENTY EACTI ITY EN	TAPIT FTI F	* 06490000
*	DKING (OF CAT! LWCIFILL BOI	POINT TO OUTPUT DCS SET DDNAME IN ERROR MSG OPEN FILE WAS OPEN SUCCESSFUL? NO- REMLERR RESET FLAGS YES- GO FIND SEGMENT ERROR- EOF- POINT TO SEGMENT WRITE IT NORMAL POINT TO OUTPUT DCB CLOSE IT COPY DCB ADDRESS FREE QSAM BUFFERS R INPUT FILE	× 06500000
-	SPACE :			06510000
EDITSGMT	DS (OH Then heme	SET SEGMENT ETLE NAME?	06520000 06530000
	TA	RI, TDSN	SET SEGMENT FILE NAME? POINT TO DEST POINT TO NEXT BYTE IS THIS A BLANK DELIMETER NO- CONTINUE MOVE IN ASTERISK	06540000
	В	×+8		06550000
.IDSHLOOP	מט	OH 1401)	DOINT TO MEYT BYTE	06560000
٠	LA	0(21).C'	IS THIS A BLANK DELIMETER .	06580000
	3118	105HL00P	NO- CONTINUE	06590000
	MV I	0(RI),C'''	MOVE IN ASTERISK	06610000
SKIPTDLM	DS	0H	LOAD ADDRESS OF ISPLINK ROUTINE	86620000
	CALL	(15).(EDIT,TEMPOSN.	,,PANEL2),VL	06630000
•	SPACE	i		06640000
	다	R15,=N'4'	YES-	06660000
	BF.	BYPASSX	NORMAL RETURN(NOSAVE)	06670000
	MVC	IDCB. =CL8'SGMTFILE'	SET INPUT DONAME FOR REBLOCK	06680000
NYO LEFT	B	TRANLOOP	LOAD ADDRESS OF ISPLINK ROUTINE ,,PANEL2),VL ABNORMAL RETURN: YES- NORMAL RETURN(NOSAVE) SET INPUT DDNAME FOR REBLOCK GO TRANSLATE AGAIN	06700000
BYPASST	SPACE	1	CLOSE FILE COPY DCB ADDRESS FREE QSAM BUFFERS SET MSGID DISPLAY MSG DISPLAY RESULTS SET MSGID DISPLAY MSG DISPLAY MSG DISPLAY MSG DISPLAY RESULTS	06710000
	CLOSE	((R12))	CLOSE FILE	06720000 06730000
	-SPACE	91 912	COPY DCB ADDRESS	06740000
	SPACE	1		06750000
	FREEPO	iar (1)	FREE QSAM BUFFERS	06750000
	SPACE_	MSGID. =CL8'EDIL 050'	SET MSGID	06780000
	BAL	R9, SETMSGX	DISPLAY MSG	06790000
	8	DISPPRIM	DISPLAY RESULTS	06800000
BYPASSX		MSGID. =CL8'EDIL063	SET MSGID	06820000
	BAL	R9, SETMSGX	DISPLAY MSG	06830000
	B	DISPPRIM	DISPLAY RESULTS	06840000 06850000
X	SPACE_			× 06860000
Ŷ	UNALLO	CATE ALL FILES USE	D	* 06870000 00008800 X
¥				06890000
ENDSESS	SPACE DS	OH .		06900000
	ESTAE	0	CANCEL ESTAE	06910000
	SPACE	DI DELLINAL DE	POINT TO TEXT UNIT LIST	06920000 06930000
-	— <u>{</u> \$ }}	DI NYNDR+SGGTXTPP-	SPORB STORE ADDRESS IN REQUEST BL	K 06940000
	MVI	DYNRB+S99VERB-S99R	B,599VRBUN SET TO UNALLOCATE	06950000 06960000
HUAL CVE	LA	R2,SOLIST	POINT TO SYSOUT LIST	06970000
UNALSYS	CLI	0(R2),C1	END OF LIST?	06980000
	BE	UNALDSO	YES-	06990000
	MVC BAL	R9.DYNA	TUNIT(8),0(R2) COPY DDNAMEGO_UNALLOC	07010000
	B	X+4	ERROR ON UNALLOCATION	07020000
	LA	R2,8(R2)	POINT TO NEXT DDNAME	07030000 07040000
HUAL DEG	B DS	UNALSYSO OH	CONTINUE	07050000
UNALDSO	LA	RZ, DSLISTO	POINT TO DS LIST	07060000
UNALDSX	O DS	OH	END OC 1757*	07070000 07080000
•	CL I BE	O(R2),C''	END OF LIST?	07090000
	- Řvc	TXTDD+S99TUPAR-S99	TUNIT(8),0(R2) COPY DONAME	07100000
:	BAL	R9, DYNA	GO UNALLOCATE FILE	07110000

```
ERROR ON UNALLOCATION POINT TO NEXT DONAME
                                                                                                       07120000
07130000
                      RZ,L'DCBXNEW(RZ)
UNALDSXO
                                                                                                        07140000
                                                   CONTINUE
             SPACE
                                                                                                        07150000
                                                     . 1
                                                                                                        07160000
UNALDSS
             DS
                      ōн
                                                   POINT TO DS LIST
                                                                                                        07170000
                      R2.DSLISTS
                      OH
                                                                                                        07180000
UNALDSXS DS
                      0(R2),C' '
                                                   END OF LIST?
YES-
                      CLOSTABL
                                                                                                        07200000
             BΕ
                      TXTDD+S99TUPAR-S99TUNIT(8),0(R2) COPY DDNAME
R9,DYNA GO UNALLOCATE FILE
R2,L'DCBXNEH(R2) POINT TO NEXT DDNAME
                                                                                                        07210000
              MVC
                                                                                                        07220000
07230000
07240000
              BAL
                       RZ, L DCBXNEW(R2)
              ĹΑ
                       UNALDSXS
                                                    CONTINUE
                                                                                                        07250000
              SPACE
                                                                                                        07260000
                                                                                                        07270000
 CLOSTABL DS
                       OH
                                                    LOAD ADDRESS OF ISPLINK ROUTINE
                                                                                                        07280000
                       R15, ISPLADOR
                       (15) (TBCLOSE VARTABLE) VL
                                                                                                        _07290000
07300000
              SPACE
                                                    LOAD ADDRESS OF ISPLINK ROUTINE
                                                                                                        07310000
                       (15), (VPUT, SAVLIST, PROFILE), VL
                                                                                                        07320000
              SPACE
                                                                                                        07340000
07350000
              RESTORE REGISTERS AND RETURN TO CALLER
                                                                                                        07360000
07370000
 RETURNX
                       OH
              DS
                      0H
R13,4(,R13)
R14,12(,R13)
R0,R12,20(R13)
R14
                                                    RESTURE CALLERS SAVE AREA RETURN ADDRESS
                                                                                                        07390000
07400000
                                                                                                        07410000
07420000
                                                                                                         07430000
              SPACE 1
                                                                                                         07440000
              IHIS SUBROUTINE HILL UNVALLOCATE THE FILES NEEDED. RETURN TO THE CALLER WITH A DISPLACEMENT DEPENDING ON
                                                                                                         07450000
                                                                                                         07460000
                                                                                                        07470000
               THE RETURN CODE IN R15.
                                                                                                         07480000
              ON ENTRY: R9 => RETURN ADDRESS
                                                                                                        07490000
07500000
              RETURNS : 0(R9) => ERROR RETURN
4(R9) => NORMAL RETURN
                                                                                                         07510000
                                                                                                        07520000
_07530000
                                                                                                         07540000
07550000
               SPACE 1
                       ÕН
 DYNA
                                                                                                         07570000
07580000
                                                     SET UP REQUEST BLOCK CHAIN
                        RI . DYNRBE
              DYNALLOC ,
SPACE 1
LTR R15,R1
BNZ 0(R9)
                                                                                                         07590000
                                                     GO ALLOCATE IT
                                                                                                         07680000
                                                    ALLOCATION_SUCCESSFULZ
                                                                                                         07610000
07620000
07630000
                                                     TAKE NORMAL RETURN
                        4(R9)
               SPACE 1
                                                                                                         07650000
07660000
               LOG MESSAGES
                                                                                                         07670000
               SPACE 1
                                                                                                          07690000
                        OH
RIS, ISPLADOR
  LOGIT
               ĎS_
                                                                                                          07700000
                                                     LOAD ADDRESS OF ISPLINK ROUTINE
                        (15), (LOG, MSGID), VL LOG IT
                                                                                                          07710000
                SPACE 1
                                                                                                          07730000
07740000
                        R9
                                                                                                          07750000
                                                                                                          07760000
               SET MESSAGES
                                                                                                          07780000
                SPACE
                                                                                                          07790000
  SETMSGX
               DS
                        RIS, ISPLADDR
                                                     LOAD ADDRESS OF ISPLINK ROUTINE
                                                                                                          07800000
                                                                                                          07810000
                CALL (
                        (15), (SETMSG, MSGIB), VL LOG IT
                                                                                                          07820000
                                                                                                          07830000
                         R9
                RR
                SPACE 1
                                                                                                          07850000
07860000
                ERROR ROUTINES
                                                                                                          07880000
                        TABLE_CREATE_ERROR
RIS,RTNCODE SAVE RETURN CODE
MSGID,=CL8'EDILOS1' SET MSG ID FAILURE
ERROR
                SPACE 1
                                                                                                          07890000
   ERRORQ
                                                                                                          07900000
07910000
                ST
                                                                                                          07920000
                 SPACE
                                                                                                          07930000
                         OH ALLOCATION FAILURE
RIS,RINCODE SAVE RETURN CODE
REEZCODE,DYNRB+S99ERROR-S99RB SET REASON CODE
DDERR,JXTDD+S99[UPAR-S99]UNIT_SET_DDNAME_IN_MSG
MSGID,=CL8'EDILOS2' SET MSG ID FAILURE
                                                                                                          07940000
07950000
   ERROROZ
                 DS
ST
                                                                                                          07960000
                                                                                                           87970000
                 MVC
                                                                                                           07980000
                 MVC
                                                                                                           07990000
                                                                                                           08000000
                 SPACE 1
                                                      ALLOCATION_EAILURE
SAVE RETURN CODE
                                                                                                           08010000
   ERRORO3
                 DS.
ST
                          R15,RTNCODE
                                                                                                          08020000
```

NUC RESCORDE SYMEN-SYSTEMS SET REASON CODE NUC DEER, TETOD-SYSTUPAR-SYSTEMS SET REASON CODE OSCISIONO NUC DEER, TETOD-SYSTUPAR-SYSTEMS SET REASON CODE OSCISIONO OSCISIONO NUC STATE STATE STATE SET DIAL ACTUAL PROPERTY OF STATE STATE STATE STATE SET DIAL ACTUAL PROPERTY OF STATE STATE STATE STATE SET DIAL ACTUAL PROPERTY OF STATE STATE STATE STATE SET DIAL ACTUAL PROPERTY OF STATE STATE STATE STATE SET DIAL ACTUAL PROPERTY OF STATE				5,367,664	
NVC			25		26
STACE STAC		MVC I	DERR,TXTDD+S99TUPAR-S9	POTUNIT SET DONAME IN MSG	08030000 08040000
ERRORO4 DS					08060000
### SPACE REROR	ERROR04	20 4		BLOCK ERROR VE_RETURN_CODE	0000000
### ATTICLY PALLURE	· · · · · ·	MVC I	SGID, =CL8'EDIL054' SE	T MSG ID FAILURE	08100000
ERRORS DS		SPACE 1			08120000
SACE NOT OPEN FAILURE 08190000	ERRORO5	DS	HAT	TACH FAILURE	08130000
### STACE CONTROL CONT		ST I	RIS,RTNCODE SAV	VE RETURN CODE T MSG TD EATLURE	03140000
ERRORO DS		B I	RROR	, MSG ID PAILURE	08160000
MUC MSGID, =CL8'EDILO56' SET MSG ID FAILURE 81,90000	EDD ODO		u	CH CATHOC	
ERRORGO DS OH TRADD FAILURE 02220000 NOT RIS, RYNCODE SAVE RETURN CODE 02230000 PROCED TO SAVE RETURN CODE 02250000 PROCED TO SAVE RETURN CODE 022500000 PROCED TO SAVE RETURN CODE 02250000000000000000000000000000000000	-	MVC I	1SGID,=CL8'EDIL056' SE	T MSG ID FAILURE	08190000 0820000
## NOTE MSGID.=CLE*EDILOS** SET MSG ID FAILURE 02250000 ## B	FR80807	DS	H TB	ADD FAILURE	08220000
B FEROR	CHRONOT	ST I	R15,RTNCODE SA	VE RETURN CODE	08230000
SPACE				T MSG ID FAILURE	
SPACE CRIZ1)		SPACE			08260000
SPACE CRIZ1)	ERRORO8	DS	DH PA	RSE SEGMENT	
SPACE COPY DC3 ADDRESS G3320000	•	SPACE	l		
RI, RIZ		CLOSE	(TR12)) C	LOSE IT	
SPACE				CZSADDA COD YPO	
SPACE 1 LA RIZ, OUTDOES POINT TO OUTPUT DOES SPACE 1 CLOSE (KRIZ)) CLOSE IT 08370000 SPACE 1 LR RI, RIZ COPY DOE ADDRESS 08400000 SPACE 1 LR RI, RIZ COPY DOE ADDRESS 08400000 SPACE 1 SPACE 2 SPACE 3 SPACE 4 SPACE 3 SPACE 4 SPACE 4 SPACE 3 SPACE 4 SPACE 4 SPACE 5 SPACE 5 SPACE 5 SPACE 6 SPACE 6 SPACE 6 SPACE 6 SPACE 7 SPACE 7 SPACE 7 SPACE 8 SPACE 9		_SPACE_	1	hee as all bluesens	
TA				KEE ASWW BOLLEKS	
CLOSE ((RIZ)) CLOSE IT		LA	R12,0UTDCB . P	OINT TO OUTPUT DCB	08360000
SPACE	•	SPACE	1 (7812))	LOSE II	
SPACE FREEPOOL (1)		SPACE	1	· ·	08390000
FREEPOOL (1)				OPY DCB ADDRESS	
MVC MSGID.=CL8*EDIL058* SET MSG ID FAILURE 03840000 036600000 03660000 03660000 03660000 03660000 03660000 03660				REE QSAM BUFFERS	
B				T MSG ID EATILIDE	
SPACE SAVE RETURN CODE		B	ERROR	HIS ID FAILURE	
ST	500000			ATT EDUND	00/7000
ERROR	ERRURUS	ST	RIS.RINCODE SA	VE RETURN CODE	08430000
SPACE CLOSE ((R121) CLOSE FILE CREATED CLOSE ((R121) CLOSE FILE CREATED		_Mvc	MSGID <u>=CL8'EDIL059'</u> SE	I MSG ID FAILURE	08490000
SPACE NVC MSGID, = CL8'EDIL060' SET MSG ID FAILURE		SPACE	1		0.000 (2.80
SPACE GREEN GREE	ERROR10	- DS	((8121) M	IRK FILE FORMAT ERROR	· · 08520080 08530000
B	-	SPACE	1 .		08540000
SPACE			MSGID, =CL8'EDIL060' SE	T MSG ID FAILURE	
SPACE CLOSE ((R12)) CLOSE FILE			1		08570000
CLOSE (R12) CLOSE FILE	ERRORII			EGMENT FILE FORMAT ERROR	
MVC		CLOSE	((R12)) CI	OSE FILE	08600000
SPACE 1			MSGIN =CLAYENILOGI SE	T MSG TO FATLURE	
## PROPRISE DS OH SYSTEM ABEND 08650000 MVC MSGID,=CL8'EDIL062' SET MSG ID FAILURE 08660000 MVC MSGID,=CL8'EDIL062' SET MSG ID FAILURE 08660000 MVC MSGID,=CL8'EDIL062' SET MSG ID FAILURE 08670000 MVC MSGID,=CL8'EDIL062' SET MSG ID FAILURE 08670000 MVC MSGID		В		. 1130 29 / 1260112	08630000
MVC	5000017			YSTEM AREND	
SPACE	ERRURIZ		MSGID, =CL8'EDIL062! SI		08660000
BAL R9,LOGIT GD LOG IT G					
BAL R9,SETMSGX GD DISPLAY MSG	ERROR		OHE1	DIT_ERROR	08690000
TM FLAGI, INIT ARE WE INITIALIZING? BO ENDSESS YES—END SESSION 08730000 B DISPPRIM NO—DISPLAY PANEL 08740000 SPACE 1 08750000 X THE FOLLOHING ROUTINE RETRIEVES THE NEXT LOGICAL RECORD 208780000 X FROM A DASD DATASET. 20880000 X INPUTS: 20880000 X R5 - RETURN ADDRESS 208840000 X 00170005 X R0 - INPUT RECORD LENGTH 208860000 X R1 - INPUT RECORD LENGTH 208860000 X SPACE 2 08900000 X SPACE 2 08900000 SPACE 2 08900000 STM R14,R1,SAVEREGS SAVE REGISTERS 08930000					
SPACE 1			FLAGI, INIT . A	RE WE INITIALIZING?	08720000
SPACE 1			ENDSESSY	ESEND_SESSION	
X				O- DISTERT PRACE	08750000
### THE FOLLOWING ROUTINE RETRIEVES THE NEXT LOGICAL RECORD ### 08780000 ### 08780000 ### 08780000 ### 08780000 ### 088800	ž				
X		THE F	LLOWING ROUTINE RETRI	EVES THE NEXT LOGICAL RECORD	× 08780000
X		FROM	A DASD BATASET.		
X	¥	INPUT	\$:		×_08810000
X	×				
X	×				× 08840000
R0 - INPUT RECORD LENGTH	. <u>¥</u> .	OUTPU	<u>rs:</u>		
X	×				* 0887000C
XX 08900000 SPACE 2 03910000 READFILE DS 0H ENTRY POINT IDENTIFIER 08920000 STM R14,R1,SAVEREGS SAVE REGISTERS 08930000		R1 -	INPUT RECORD ADDRESS	•	
READFILE DS OH ENTRY POINT IDENTIFIER 08920000 STM R14,R1,SAVEREGS SAVE REGISTERS 08930000		=====			× 08900000 .
STM R14,R1,SAVEREGS SAVE REGISTERS 08930000	001200			UTDY DOINT INCUTTEES	
	KEAUFIL		R14,R1,SAVEREGS		08930000
	. ——				08940000

				20
	TM	BEDFLAGI, INEOF+PERM	TERR EOF PREVIOUSLY REACHED?	08950000
		NALLOFF, READEOF RO, READEOF	YES- POINT TO FOR FYTT POUTTNE	08960000 08970000
	STOM	RO, B'0111', DCBEODA	POINT TO EOF EXIT ROUTINE SAVE EODAD ADDR	08980000
•	LA	RO, READSYN.	POINT TO SYNAD EXIT ROUTINE	08990000
•	STCM	RO, B'0111', DCBSYNA	SAVE SYNAD ADDRESS	. 0900000
	SPACE	1		09010000
		INPOCB	RETRIEVE NEXT RECORD	09020000 .
	SPACE			09030000
	TM BC	DCBRECFM, DCBRECU ALLON, RECU	RECFM U! YES	09040000 09050000
	TM TM	DCBRECFM, DCBRECV	RECEM V?	09060000
	RC .	ALLON RECV	YES-	09070000
	SPACE	1	RECORD FORMAT	09080000
<u>*</u>	UNDEFI	NED OR FIXED LENGTH	RECORD FORMAT	09090000
RECU	DS	OH T	LOAD RECORD LENGTH READ UNBLOCKED RECORDS?	09100000
KECU	LH	RO . DCBL'RECL	LOAD RECORD LENGTH READ	. 0911000
		RO, RO	UNBLOCKED_RECORDS?	09130000
	BC	NZERO, READFZOO	NO-	09140000
	LH	RO, DCBBLKSI	KEIKTERE BEACKSTYE	4912000
	B	READF200	RETURN	4779444
*	SPACE Vartar	LE LENGTH RECORD FO	RMAT	09170000
	SPACE			09190000
	DS	OH		09200000
	ŀД	RO, OS, RI.)	RETRIEVE VARIABLE RECORD LENGTH POINT TO DATA PORTION OF RECORD ADJUST LENGTH FOR RDW	09210000
	LA S	R1,4(,K1)	ADDIECT LENGTH COO DOM	09220000
	B	READF200	RETURN	09240000
	DS	OH		
	SLR	RO, RO	CLEAR READ LENGTH SET EOF ENCOUNTERED IS_DATA_SET_OPEN? NO-	09260000
	OI	BEDFLAGI, INEOF	SET EOF ENCOUNTERED	09270000
	DS	OH _DCBOFLGS_DCBOFO <u>PN</u>	TO DATA SET ODENS	09280000
	IM BC	ALLOFF READF200	NO-	0930000
	SPACE			09310000
	CLOSE	((R12))	CLOSE IT	09320000
	SPACE	1	COPY DCB ADDRESS	09330000
	LR	R1,R12	COPY DCB ADDRESS	
	SPACE	ο <mark>ο</mark> ι (1)	ERFE OSAM RHEEFPS	09350000
	SPACE	1	FREE QSAM BUFFERS	09370000
	SLR	RO, RO	SET LENGTH	09380000
	В	READF300 .		0,0,000
READSYN	DS	OH	REQUEST FORMATTED MESSAGE	09400000
	SPACE	1		09420000
¥.	MVC	SYNADTXT,50(R1)	COPY MESSAGE TEXT	09430000
·	SPACE	1		09440000
<u> </u>		SS TEXT=MSG230	NOTLEY OPERATOR -	- 09450000
	SPACE	o i <	RELEASE BUFFERS	09460000 09470000
	SPACE		MEETING BOTTERS	09470000 09480000 09490000 09500000
•	OI	BEDFLAGI, PERMIERR	SET PERMANENT INPUT ERROR	09490000
	В	READELS	GO CLOSE IF NECESSARY	09500000
	SPACE	1		09510000
X	MODMA	L RETURN	,	× 09520000 × 09530000
	HUKINA			× 09540000
-	SPACE	1	SAVE FOR SEGMENT ROUTINE	09550000
READFZOO		0H	CANC FOR ECONOR CONTING	09560000 -
•	ŞĮ .	EO MOVESTATALS	SAVE FUR SEGMENT ROUTINE	042/0000
READESOO	ST	NH	JATE	09590000
VCV01 300	fu n,	R14.R1.SAVEREGS	RESTORE REGISTERS	09600000
	BR	RS		09610000
	SPACE		•	09620000
X			· X	09630000
×	FIND	SEGMENT ROUTINE	X X	09640000 09650000
×	SILEGA	UTTHE TO PROCESS TH	E HEADER RECORD AND PICK	09660000
× ·	DUT T	HE DATA ELEMENT AND	SEGMENT SEPERATORS TO	09670000
â	DYNAM	ICALLY MAKE TO TRAN	SLATE TABLES. *.	09680000
×			X	09690000
X	INPUT	- R9 - RETURN AD	DRESS * F SEGMENT BUILD AREA *	09700000
×	MOVE	STATE G - IPNOTH OF	F SEGMENT BUILD AREA X SEGMENT BUILD AREA X	09710000 09720000
* *	MUVE	STAT+ 8 - ADDRESS O	E_ANSIZUNJEDI_RECORD	09730000
-	MOVE	STAT+12 - LENGTH OF	ANSI/UNJEDI RECORD X	09740000
x .			X	09750000
X			X	09760000
2411-221-	_SPACE	<u></u>		09770000
FINDSGMT	XC	OH MOVESTAT(%),MOVEST	AT RESET STATS OF BUILD AREA	09790000
	ĹM	R14.R15,MOVESTAT+8	GET HHERE LEFT OFF IN RECORD	09800000
	LTR	_R15_R15	ANY BYTES LEFT TO PROCESS?	00011000
	BNP	FNDHSTRT	NO-	09820000
	BCTR	R15,0	YES- GET EXECUTABLE LENGTH	09830000 09840000
	ΓĄ	R5, TABLEO1 R15, ENDALPHA	GET TABLE ADDRESS FIND SEGMENT TO	09850000
	EX			

		40	5,367,664		
		29		30	
	BZ	FNDS0080	NOT FOUND POINT PAST LAST BYTE OF RECORD COPY ADDRESS OF SEGMENT ID GET LENGTH LEFT RESET STATS CONTINUE	0986000	. O
	LA	R15.1(R15,R14)	POINT PAST LAST BYTE OF RECORD	0987000	0 •
	LR	R14,R1	COPY ADDRESS OF SEGMENT ID	0988000	0 '
FNDS0070	_ <u>\$</u> R	CH CH	GET TENSILL FEET	0000000	<u></u>
	STM	R14,R15,MOVESTAT+8	RESET STATS	0991000	0 .
	В	FNDHSTRT	CONTINUE SET ZERO BYTES LEFT OF THIS RECORD CONTINUE	0992000	ů.
FNDS0080	-DŞ	OH	SET ZEDO BYTES LEST OF THE DECE	0993000	
	B	FNDS0070	CONTINUE	D 0994000 0995000	
FNDALPHA	TRT	0(0,R14),0(R5)	CON. 1.102	0996000	
FNOHSTRY		<u>OH</u>		0997000	
	ICM BNZ	RO.B'IIII', MOVESTA	T+12 FINISHED READING RECORD?	0998000	
	SPACE	FNDSG090		0999000 100000	
	BAL	R5, READFILE	RETRIEVE NEXT INPUT RECORD	100000	in .
	ĪM	BEDFLAGI, INEOF	RETRIEVE NEXT INPUT RECORD EOF REACHED? YES-	1002000	0
	BO	ENDH1300	YES-	1003000	0
	SPACE	PIG PIS MOVESTATER	YES- GET RECORD ADDRESS/LENGTH	1004000	0
FNDS0090		OH	OCT RECORD ADDRESS/ CENOTA	1006000	ŭ
	TCM	RO.B'1111', MOVESTA	T+4 FINISHED BUILDING RECORD?	1 4 4 7 4 4 4	
•	BNZ	FNDS0100	NO-	1008000	0
	57	NI MOVESTAT	NOT GET ADDRESS OF BUILD AREA	1009000	
	LA.	RI.L'ERRBUFF	GET LENGTH OF BUILD AREA	1011000	
	ŠŤ	R1, MOVESTAT+4	SAVE IT	1012000	ıō
FNDS0100	DS	OH	No Finance	1013000	0
	CLC	255,0(814)	NU- SEPARATOR?	1014000	10
FNDS0500	BE DS	UH .	163	1017000	in
•	LA	R14,1(R14)	NO- POINT TO NEXT BYTE	1017000	10
	BCT	R15, FNDS0100	NO- GET ADDRESS OF BUILD AREA SAVE IT NO- SEPARATOR? YES- NO- POINT TO NEXT BYTE PROCESS REST OF RECORD UPDATE DISPLACEMENT OF SEPARATOR SAVE IT GET MOVE STATS RECV LGTH > SEND LGTH? NO- ERROR SET RECV LGTH TO SEND LGTH MOVE TO RECORD BUILD AREA GET MAX LGTH OF BUILD AREA MINUS ACTUAL BYTES MOVE SAVE MOVE STAT GO READ ANOTHER RECORD	1012000	10
FNDS0600	DS	OH MOUSETAT:	HORATE BYERLANDING OF THE	1019000	10
	S	RI, MUVESTAT+12	UPDATE DISPLACEMENT OF SEPARATOR	1020000	10
	STH	RI, ELMTCTR	SAVE IT	1021000	10
	LM CR	R14, R1, MUVESTAT	RECY LIGHT > SEND LIGHT	1023000	30
	BNH	FNDHERR	NO- ERROR	1024000	jo
	LR	R15,R1	SET_RECV_LGTH_TO_SEND_LGTH	1025000	10
	MVCL	R14,R0	MOVE TO RECORD BUILD AREA	1026000	10
	L S	RID, MUVESIAIT4	MINUS ACTUAL BYTES MOVE	1027000	10 10
	_STM	R14.R1.MOVESTAT	SAVE MOVE STAT	102900	á ő
	В	FNDHSTRT	GO READ ANOTHER RECORD	1030000	30
FNDH0900	DS	OH	ALA LOTURAS BEST OF SECHENT	103100	10
	··\$ ·	RI4; MUVES (A1+8 ****	CALC LGTH OF REST OF SEGMENT ADD_ONE_FOR_SEGMENT GO MOVE TO BUILD AREA SET UP FOR MOVE RECV LGTH > SEND LGTHT YES-	102500	10 10
	- <u>}</u>	FNDH1000	GO MOVE TO BUILD AREA	103400	00
FNDH1000	DS	OH		103500	00
	ĽM	R14.R0.MOVESTAT	SET UP FOR MOVE	103600	00
	_도움	_R15,R1	YES- NO- SET SEND LGTH TO RECV LGTH	103700	00
	BH LR	R1.R15	NO- SET SEND LOTH TO RECV LOTH	103900	00
	B	FNDH1200		104000	0.0
FNDH1100		_OH		104100	00
5115117.00A	LR	R15,R1	SET RECV LGTH TO SEND LGTH	104200	00
FNDH1200	LTR	915.815	LENGTH POSITIVE:	104400	00
	BNP	ENDH1400	LENGTH POSITIVE: YES- TOO BIG? YES-	104500	ãã
	СН	R15,=H'256'	YES- TOO BIG?	104600	00
	BH	FNDH1400	YES- MOVE TO RECORD BUILD AREA		
	MVCL LR	R14,R0 R15,R0	GET ADDR PAST SEPERATOR	104800 104900	
	- <u>Fu</u>	RIS, MOVESTAT+8	GET ADDR PAST SEPERATOR CALC BYTES MOVED	105000	
•	Ĺ	R1, MOVESTAT+12	GET TOTAL BYTES IN RECORD	105100	00
	SR	RI,RIS	CALC RESIDUAL BYTE COUNT	105200	
	STM L	RO,R1,MOVE <u>STAT+8</u> R15,BUFFER	SAVE FOR LATER GET BEGINNING OF RECORD	105300 105400	
	รัก	R14,R15	CALC LENGTH OF RECORD	105500	
	LÀ	R14,4(R14)	ADD LENGTH OF RDW	105600	100
	<u></u>	RIS, BUFFRDW	GET ADDRESS OF ROW	105700	
	STCM	R14, B'0011', 0(R15) SET ROW RETURN	105800	
FNDH1300	B DS	FNDHNORM OH	RE) UNIT	106000	
	cic_		ZERO STILL BUILDING A SEGMENT?	106100	00
	BE	FNDHEOF	NO-	106200	
ENDUT 464	B	FNDHERR	YES- END OF SEGMENT MISSING	106300 106400	
FNDH1400	STM.	OH R14,R1,MOVESTAT	" SAVE REGISTERS	106500	
		8, DUMP		106600	000
	SPACE		•	106700	
*\$	1.4	CDONG OCTUGE		108800 ¥ 106900 ×	
X 2	+0	ERROR RETURN.		× 10700	
<u></u>	SPAC	£ 1		107100	000 .
FNDHERR	DS	OH	•	107200	000
	· B	O(R9)		107300	
×	SPAC	t 1		107400 × 107500	
X	+4	EOF RETURN		¥ 107600	
;^				× 107700	000
	SPAC			10780	
FNDHEOF	DS	OH ·		107900	
	В	4(R9)		. 108000	140

```
SPACE 1
                                                                                                                      10810000
                                                                                                                     10820000
                                                                                                                     10830000
                        NORMAL RETURN
              +8
                                                                                                                     10840000
10850000
              SPACE 1
DS OH
                                                                                                                      10860000
ENDHNORM
                        8(R9)
                                                                                                                      10870000
               SPACE 1
                                                                                                                      10880000
               SCHTBL CHARSET=ALPHA.EUNC=LOCATE
SPACE 1
DS OH
TABLE 01
                                                                                                                      10900000
                                                                                                                      10910000
TBABEND
              DS
               PUSH---USING----
                                                                                                                      10920000
              DROP_____USING *,R15
                                                                                                                      10930000
                                                                                                                      10940000
                SING #,RIS
H RO,=H'IZ' SDWA PRES
HE AAABENDI YES-
RETURN'TO RIM, ATTEMPTING RECOVERY:
                                                           SDWA PRESENT!
                                                                                                                      10950000
               BNE
                                                                                                                      10960000
               SPACE 1
LA RO, AAABEND2
LA R15,4
                                                                                                                      10980000
                                                           POINT TO REINSTATEMENT ROUTINE
INDICATE TASK IS TO BE REINSTATED
RETURN TO RTM
                                                                                                                      10990000
               LA
              BR R14
SPACE 1
DS OH
                                                                                                                      11010000
                                                                                                                      11020000
                                                                                                                      11030000
IDHBEAAA
                        R14,R12,12(R13)
R10,R15
TBABEND,R10
                                                            SAVE REGS
                                                                                                                      11040000
               STM
                                                                                                                       11050000
               ÛSING
                                                                                                                      11060000
               USING SDWA,R4
L R2.SDWAPARM
USING EDITSBED,R2
                                                                                                                      11070000
                                                            SDWA ADR
                                                                                                                       11080000
                                                                                                                       11090000
                                                            GET BASE REGISTER
GET ADDRESSABILITY
SET 2ND BASE REG
                                                                                                                      11110000
                        R3,2048(,R2)
R3,2048(,R3)
EDITSBED+4096,R3
R1,B'0111',SDMACMPC
                                                                                                                      11120000
                                                                                                                       11140000
11150000
                                                           GET COMPLETION CODE
               ICM
               DROP
                         R4
                         R1,12
R1,=X'00000FFF'
R1,RTHCODE
                                                                                                                       11170000
11180000
               SRL
                                                              SAVE IT
                                                                                                                       11190000
               SPACE 1
SETRP REGS=(14,12),
RC=4,RETADDR=AAABENDZ,FRESDHA=YES,HKAREA=(4)
                                                                                                                       11200000
                                                                                                                       11210000
                                                                                                                       11220000
               SPACE 1
POP USING
                                                                                                                       11230000
               SPACE
DS
                         <u>2</u>
ОН
                                                                                                                         1250000
                                                                                                                       11260000
 AAABEND2
                                                              SET BASE REGISTER
                         RIO, RI
               LR
                         R11,2048(,R10)
R11,2048(,R11)
R2,=A(ERROR12)
                                                              SET 2ND BASE REG
                                                                                                                       11280000
                                                                                                                       11290000
                                                              POINT TO RESTART ADDRESS
                                                                                                                       11300000
                                                              GO TO IT
                                                                                                                       11310000
                BR
                SPACE 1
                                                                                                                       11330000
11340000
                                                                                                                       11350000
                                                                                                                       11360000
11370000
               MISC DATA AREA
                                                                                                                    ×
                                                                                                                        11380000
11390000
                SPACE I
                          ČL8'
                DC
DC
 ZUSER
                                                                                                                        11400000
                          A(Q)
 XLATOR
SAVEAREA DC
SAVEREGS DC
DBLHORD DC
BUFFRDH DC
BUFFER DC
                                                                                                                       11410000
                          18F'0'
                                                                                                                       11420000
                                                                                                                       11430000
  DBLHORD DC
BUFFER DC
MSGID DC
DCBNAMES DC
IDCB DC
                           Ď.a.
                          A(ERRRDW) POINT TO RDW
A(ERRBUFF) POINTER JO ERROR BUFFER
CL8'' MESSAGE ID
AL2(L'IDC3+L'ODC3+L'EDC3) LENGTH OF DDNAMES
CL8'' INPUT DC3 FOR REBLOCK
CL8'' QUTPUT DC3 FOR REBLOCK
CL8'REBLKERR' SYSPRINT DC8 FOR REBLOCK
A(0)
C.1.1.
                           A (ERRROW)
                                                            POINT TO ROW
                                                                                                                        11450000
                                                                                                                        11460000
                                                                                                                        11480000
  IDCB
                                                                                                                        11500000
  EDCB DC
                                                                                                                           510000
                                                                                                                       11520000
11530000
  TEMPOSH ...DC
                           CL44'
4F'0'
  TOSN_
MOVESTAT
                                                            CONSTANT ZEROS
CONSTANT BLANK
                                                                                                                        11550000
  BEDZERO DC
BEDBLANK DC
                                                                                                                        11560000
                           CL8' '
                                                                                                                        11570000
11580000
  ELMTCIR DC
BEDFLAGI DC
                           X . 00.
                           X'80'
X'40'
X'00'
X'80'
                                                            END OF FILE
   INEOF
                                                                                                                        11600000
11610000
11620000
11630000
                                                            ERROR READING INPUT FILE
SEGMENT SEPARATOR
MISC FLAG
  PERMIERR EQU
  FLAGI
                                                            INITIALIZING
   INIT
                  SPACE 1
                                                                                                                        11650000
11660000
                  DYNAMIC ALLOCATION CONTROL BLOCKS
                                                                                                                        11670000
                                                                                                                         11680000
                  SPACE 1
                                                                                                                         11690000
                            <u>0F'0',X'80',AL3(DYNRB)</u>
XL(S99RBEND-S99RB)'00'
DYNRB+S99RBLN-S99RB
   DYNREE
                 DC
DC
                                                                                                                         11700000
                                                                                                                         11710000
                  ORG
                            ALI(S99RBEND-S99RB)
```

12610000

12620000 12630000

CL8'SONLG',X'90',X'0050',X'1810',X'000005'

SPACE 1

SPACE I

DC

DSLISTS

```
36
                  DONAME-ALLOC LIST FOR DISP=QLD
                                                                                                                                 12650000
                           1
CL8'FAOUT', X'50', X'0800', X'5004', X'000032'
CL8'OUTPUT', X'50', X'0800', X'5004', X'000064'
CL8'TESTBEDZ', X'50', X'0800', X'5004', X'000005'
CL8'REJECT', X'50', X'0800', X'5004', X'000028'
CL8'RECOV', X'50', X'0804', X'5028', X'000028'
CL8'STORE', X'90', X'0804', X'5028', X'000028'
CL8'STORE', X'90', X'0050', X'1810', X'000010'
                                                                                                                                12660000
12670000
                  SPACE
  DSLISTO
                  DC
                                                                                                                                 12630000
                                                                                                                                 12690000
12700000
                  DC
                                                                                                                                 12710000
                                                                                                                                 12720000
                                                                                                                                 12730000
                  DC
                             CL8'
                                                                                                                                 12750000
                  SPACE I
                                                                                                                                 12760000
                                                                                                                                 12770000
                  DEFINITION OF PROGRAM STORAGE FOR PANEL VARIABLES
                                                                                                                                12780000
                                                                                                                                12790000
                  SPACE
                                                                                                                                12800000
  DSH
                            <u>CL44''</u>
CL44''
CL44''
CL44''
                  םם
                 DC
                                                                                                                                 12810000
  DSNW
                                                                                                                                12820000
12830000
  DSNS
  DSNL
                           CL64''
CL5''
CL12''
CL71''
CL6''
CL6''
                                                                                                                                12840000
12850000
                 SID
                                                                                                                                12860000
  VERS
 AGCY
REAS
LASTSEG
NUMB
                                                                                                                                12880000
                                                                                                                                 12890000
                 DC
                                                                                                                                 12900000
                 DC
                                                                                                                                12910000
 TRANDATA EQU
                            STD, x-STD, C'C'
                                                                                                                                12920000
                           DE
CL41.
CL21
 RINCODE DC
REEZCODE DC
                                                                                                                                12930000
                                                                                                                                12940000
                                                                                                                                12950000
 DDERR
                 DČ
                            CL8'
                                                                                                                                12960000
                                                                                                                                12970000
                                                                                                                                12980000
                 DEFINITION OF ISPF SERVICE REQUESTS
                                                                                                                                12990000
                                                                                                                             ×
                           CL8'DISPLAY'
CL8'EDITB'
CL8'EDITB'
CL8'EDITB'
CL8'EDITB'
                                                                                                                                 3010000
 DISPLAY
                 DC
 EDIT
                 DC
                                                                                                                                13020000
                                                                                                                                13030000
                 DC
DC
 PRIMARY
 PANEL 3
                                                                                                                                13040000
13050000
CONTROL
SELECT
                 DC
DC
                           C'CONTROL'
C'SELECT'
C'ERRORS'
                                                                                                                                13070000
                                                                                                                                13080000
 ERRORS
RETURN
                DC
DC
                                                                                                                                13090000
13100000
                           C'RETURN'
 VDEFINE
                           CL8 'VDEFINE'
VGET
VPUT
PROFILE
                0000000
                           CL8'VGET'
CL8'VPUT'
CL8'PROFILE
                                                                                                                                13120000
                                                                                                                                 3130000
                                                                                                                                13140000
SHARED
CHAR
                           CL8'SHARED'
CL8'CHAR'
                                                                                                                                13150000
                                                               . :
                                                                                                                                13160000
HEX
TECREATE
                            CL8 'HEX
                DC
                           CL8 TBCREATE
                                                                                                                                13180000
 TBDISPL
 TBADD
                 DC
                           CL8 'TBADD'
                                                                                                                                13200000
TBTOP
TBSARG
                 DC
DC
                           CL8'TBTOP!
CL8'TBSARG
                                                                                                                                13210000
                           CL8'TBCLOSE'
CL8'LOG'
CL8'LOG'
CL8'SETMSG'
CL8'VARTABLE'
CL8'NOWRITE'
 TBCLOSE
                 DC
                                                                                                                                13230000
13240000
 SETMSG___DC
                                                                                                                               13250000
13260000
13270000
 NOWRITE
VARLIST
                 DC
                           CL8'NOWRILE'
C'(TBNUMB TEREAS)'
E'(TBDSN TBDSNH TBDSNS TBDSNAT TBDSNAP TBDSNCT TBDSNCP
BDSNIT TBDSNIP TBDSNXT TBDSNXP TBDSNOT TBDSNOP TBDSNL)
                                                                                                                           13280000
TX13290000
                                                                                                                               13300000
13310000
13320000
 USERLIST DC
                 DEFINITION OF LENGTH OF PANEL VARIABLES
                                                                                                                               13330000
13340000
                SPACE 1
DC F
DC F
DC F
                                                                                                                               13350000
                                                                                                                               13360000
13370000
 LENGIHZ
LENGTH4
LENGTHS
                           F'4'
F'5'
F'6'
 LENGTH6
                                                                                                                               13390000
                                                                                                                               13400000
LENGIH8_
LENGTH11
                           F'11'
                                                                                                                               13410000
13420000
13430000
                DC
                00
00_00
00_
LENGTH12
LENGTH44
                           F'12'
                                                                                                                               13440000
                                                                                                                              13450000
13460000
13470000
13480000
                SPACE 1
                DEFINITION OF PANEL VARIABLES
                           1
C'CMD(ZEDITB)'
C'(ZUSER)'
                                                                                                                               13500000
SELCMD
SELCMD DC
ZUSERLIT DC
                                                                                                                               13510000
                           C'(TBDSN)'
C'(TBDSNW)'
C'(TBDSNS)'
C'(TBDSNL)'
DSNLIT
DSNHLIT
                                                                                                                               13520000
                                                                                                                                13530000
                nc
                DC
DSHSLIT
                                                                                                                               13540000
                                                                                                                               13550000
DSNLLIT
DSNAL [ II DC
                           C'(IBDSNAI)
                                                                                                                               13570000
```

5,367,664

40

What is claimed is:

- 1. A method for interactively translating electronic data interchange files, comprising the steps of:
 - (a) generating a plurality of displays for interactively controlling the translation of an electronic data 5 interchange file;

 (b) translating said electronic data interchange file until a translation error exists;

- (c) displaying said translation error on at least one of said plurality of displays so that said translation 10 error may be corrected interactively;
- (d) correcting said displayed translation error in response to data entered on said at least one of said plurality of displays; and

(e) repeating steps (a) through (d) until no translation 15 error exists.

- 2. The method of claim 1, wherein said electronic data interchange file comprises transaction data to be communicated from a sending computer to a receiving computer and said translating step occurs after communicating said electronic data interchange file to said receiving computer.
- 3. The method of claim 2, wherein said correcting step further comprises the steps of:

forming a segment file for containing a portion of said 25 electronic data interchange file where said portion includes said translation error;

placing said portion of said electronic data interchange file into said segment file;

displaying said portion on said at least one of said 30 plurality of displays for correcting said translation error; and

forming a working file comprising all correctly translated portions of said electronic data interchange file. 4. The method of claim 2, wherein said displaying and correcting steps occur interactively without the need to retranslate all previously translated portions of said electronic data interchange file.

5. The method of claim 1, further comprising the step of logging each of said translation error occurring during the translation of said electronic data interchange file.

6. The method of claim 1, further comprising the step of forming a working file of all correctly translated portions of said electronic data interchange file.

7. A programmable machine system for interactively translating business transaction data between a plurality of different dictionary-structured transaction formats, said machine system including a plurality of system components, said machine system comprising:

output circuitry for generating a plurality of visible signals corresponding to the status of translation of said business transaction data from one format to another predetermined format;

translation circuitry for translating said business transaction data into said predetermined format;

error detection and reporting circuitry for detecting the existence of a translation error and communicating said translation error to said output circuitry;

editing circuitry for interactively receiving corrections to said business transaction data and for modifying said business transaction data in response to said corrections generating corrected business transaction data; and

said translation circuitry translating said corrected business transaction data.

40

35

45

50

55

60

65